

**Testimony from Sheila Davis, Executive Director
Silicon Valley Toxics Coalition**

**To the Senate Subcommittee on Superfund and Waste
Management
Environment and Public Works Committee**

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Mr. Chairman and Committee Members:

I am Sheila Davis, and I am the Executive Director of the Silicon Valley Toxics Coalition. I want to thank you for the opportunity to speak to you today about the very important issue of electronic waste.

The problem of electronic waste in the U.S. is becoming critical. Discarded computers and other electronic products are the fastest growing part of the waste stream. And these products contain a lengthy list of toxic chemicals, which cause some serious health effects when they leak out of landfills and into our groundwater, or are incinerated into our air.

But less than ten percent of discarded computers are currently being recycled, with the remainder getting stockpiled or improperly disposed of. Fifty to eighty percent of the e-waste collected for recycling is actually being exported to Asian countries which have no infrastructure to accommodate the hazardous properties of e-waste. Due to horrific working conditions and no labor standards in many of the developing countries where e-waste is sent, women and children are often directly exposed to lead and other hazardous materials when dismantling the electronic products to recover the few valuable parts for resale.

Here, in the photo shown, you will see a woman who works in one of these dismantling shops in Guiyu, China. You will see that she has no protective equipment whatsoever. Yet she is about to smash a cathode ray tube from a computer monitor in order to remove the copper laden yoke at the end of the funnel. The glass is laden with lead but the biggest hazard this woman faces



here is the inhalation of the highly toxic phosphor dust coating inside this CRT. The monitor glass is later dumped in irrigation canals and along the river where it leaches lead into the groundwater. The groundwater in Guiyu is completely contaminated to the point where fresh water is trucked in constantly for drinking purposes.

[Photo 2001 Copyright: Basel Action Network]

So why does the computer that I turned in, at a local “recycling” event in California, end up in China, at this woman’s workplace? Why didn’t my computer get dismantled and recycled here, like I thought it would. The answer is that the market for recycling e-waste here doesn’t work. The materials used in these products are so toxic, it’s very expensive to recycle them. There are some “good recyclers” who are actually trying to recycle the products as extensively as technology allows, but this requires manual processing, and protecting workers from exposure to the toxic chemicals is very expensive. The economics just don’t work for most recyclers. So they look for the cheaper, low-road solutions, and cream off the parts that there is a local market for, and ship the rest across the ocean to become someone else’s problem. Or they use low wage prison labor for disassembly, which further undermines the chances for a healthy recycling market in this country.

So how do we fix this problem? We think the solution is to create incentives for the market system to work here. And we need to do two things to make that happen:

First we need the products to be easier to recycle. The economics of recycling will NEVER work unless these products are easier, and therefore cheaper, to recycle. Part of that means using less toxic materials. Part of that means designing them so they are more easily disassembled for recycling, without relying on prison labor or women and children in China. Here's an example of what I mean by designing for easier recycling:

A representative from a printing manufacturer told me a discouraging story about recycling at his company. He said that designers worked with the recyclers and found that if they simply added a \$1.25 component part to the new line of printers it would make the printer easier to disassemble and cheaper to recycle. But the design team was told not to include the part because there is no guarantee that the printer would be recycled, so the added cost could not be justified.

So here, the producer was not motivated to change their design because they were not concerned about the recycling end of their product's life.

So the second thing we need to do is to get the producers to take responsibility for their products at the end of their useful life, so that they do have this incentive. If the producers (and here I mean the manufacturers and brand owners) have no connection to, or responsibility for their products at disposal time, then what incentive do they have to modify their designs for better recycling, or even better reuse of their products? The answer is none – they have no incentive to do anything different.

But what if the companies did have responsibility for taking back their products for recycling? What if that was just part of their normal operation, that each company had to recycle a significant portion of its old products each year? They would simply build these takeback and recycling costs into their pricing structure. But to be competitive, (and cut their recycling costs) they would innovate, redesign, and end up with

computers that were cheaper to recycle. Less toxic materials would be used, so recycling would be easier and cheaper. And there would be no reason to even think about having to use taxpayer money to solve this problem. The market would work.

So this is the legislative solution that we are encouraging our lawmakers to adopt, the approach that is called Producer Responsibility. Of course, this is a far reaching, complex solution, with many components that can't be covered in a short testimony. But we think it's the only solution that will correct the market forces that currently send my old computer into a landfill or to a village in China. So my message here today is that this is a big picture problem that calls for big picture solutions. It won't be solved with partial fixes like tax breaks or making consumers pay a recycling fee. I encourage our lawmakers to seek the kinds of changes that will actually make the market take care of the problem of electronic waste.